HYDROTERRA ENVIRONMENTAL SERVICES
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Derek S. Bennett
Drinking Water and Groundwater Bureau
NHDES
29 Hazen Drive
Concord, NH 03302

August 08, 2010

Dear Mr. Bennett;

The purpose of this letter is to provide a revised Draft Water Conservation Plan for Governor's Green in Epping, New Hampshire per your comments on the draft plan :

**System Overview**

Reason for new source: **Expansion of residential housing development**
Number of residential connections: **28**
Description of any connections that receive more than 20,00 gpd: **None**
Water use trends with supporting data: **None available - new development**

- Maximum day yield of existing sources based on 24-hour pumping: **NA**
- Average daily water use: **NA**
- Maximum daily water use: **NA**
- Seasonal trends in water use: **NA**
- Minimum hourly flows (if available): **NA**

Population trends: **No changes - private 28 unit residential development**

- Seasonal fluctuation: **NA**
- Anticipated growth: **NA**

**System Side Management**

*Source Meters*

Name designation of each water source:

- **The Source meters will be selected, installed, and maintained in compliance with "Manual of Water Supply Practices, Water Meters-Selection, Installation, Testing and Maintenance," document identification number AWWA M6, American Water Works Association, 1999.**
- Last meter test date (if already installed) for each source: **NA**

Frequency that source meters will be tested:

- **Once a year**

Frequency that source meters will be read:

- **Every 30 days**

*Service Meters*

**Service meters will be selected, installed, and maintained in accordance with the "Manual of Water Supply Practices, Water Meters-Selection, Installation, Testing, and Maintenance," document identification number AWWA M6, American Water Works Association, 1999**.

Breakdown of unmetered connections for each of the following customer classes:

- **Residential only - will be 100 percent metered (all 28 connections)**

Proposed time frame for installing meters on unmetered connections:

- **Residential only - prior to system startup**

Proposed rate of testing/change out by customer class (or distinguish by meter size):

- **Residential only - at least every 10 years**

Frequency that service meters will be read:

- **Every 90 days**

Description of all methods used to read service meters:

- **Manual**

*Estimating Unaccounted for water (non-revenue water)*

Most recent estimate of unaccounted for water and the year it was estimated:

- **Not Available**

Frequency that unaccounted for water will be estimated:

- **Yearly**

**A response plan will be prepared and submitted to NHDES within 60 days if the percentage of unaccounted for water in the water system exceeds 15 percent of the total water introduced to the water system. The plan will identify how the water system intends to reduce the percentage of unaccounted for water to below 15 percent within two years.**

*Water Audit*

**Water audit will be calculated in accordance with "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999.**

Most recent water audit differentiating between apparent and real losses:

- **Not Available**

Frequency that water audit will be conducted:

- **Yearly**

*Leak Detection*

**Leak detection will be conducted in accordance with "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999. Leaks will be repaired within 60 days of discovery unless a waiver is obtained in accordance with Env-Wq2101.09.**

Summary of findings for the most recent leak detection surveys:

- **None Completed**

Is it anticipated that future surveys will be conducted by an outside contractor:

- **Epping Well and Pump Company**

Summary of distribution system: **NA - New System - piping / pump house for the existing 8 residential connections were installed in the early 1980s, metered in pump house only.**

- Are pipe locations known? **Some but not all**
- Breakdown of pipe material, age and length: **2" and 4" PVC 1980s**
- Availability of contact points and adequacy of spacing: **NA**

Description of leak detection method (if in house): **NA**

Percent of distribution system to be covered each year: **25 percent unless audit indicates greater frequency is necessary**

Will zone meters be installed to assist with leak detection identification and location? **No**

*Pressure Management*

Existing minimum distribution pressure: **NA**

Existing maximum distribution pressure: **NA**

**A plan and schedule will be prepared to reduce pressures in zones in excess of 80 psi (when feasible) or if not feasible, for mitigation action to monitor and repair leakage within these zones.**

*Intentional Water Loss*

Are there "bleeders" used within the system at dead ends to improve water quality or prevent freeze up and if so what looking opportunities exist?

- **There will be no bleeders**

Are storage tanks intentionally allowed to overflow because of system hydraulics or water quality concerns and if so what opportunities exist for the installation of altitude valves or tank mixing systems?

- **There will be no storage tank overflows**

*Consumption Side Management*

Conservation Rate Structure:

- **To be Determined - the NHDES will be notified once a rate structure has been developed**

Description of existing rate structure:

- **NA**

Plan and timeframe to adopt rate structure in accordance with Env-Wq 2101 (within 5 years for existing systems):

- **To be Determined - a rate structure will be adopted prior to startup**

Current and proposed billing frequency:

- **To be Determined - the NHDES will be notified once a frequency is determined**

Will separate irrigation meters be installed?

- **No irrigation system is planned for development**

Will a seasonal rate structure be utilized in addition to the general rate structure?

- **No**

*Educational Outreach Initiative*

Materials that will be used:

- **The person who will be responsible for the education outreach and /or public posting. The outreach program will consist of sending educational info to the customers. This information will include NHDES facts sheets such as the Water Efficiency Overview, Domestic Indoor and Outdoor Users, Domestic Water Audit and Water Conservation at Home. The information may also include general information on the property well site and water use. This information will be sent out at least once a year.**

*Compliance*

- **The water system will submit a form supplied to NH DES once every three years documenting how compliance with the water conservation plan is being achieved. Also all system maintenance and water conservation activities will be completed under the supervision of a certified system operator.**

If you have any questions regarding this submittal, please call me at (603) 743-5728.

Sincerely,

Digitally signed by: Jack McKenna
Date: 2010.08.11 13:45:01 -05'00'

Jack M. McKenna, PG
Manager